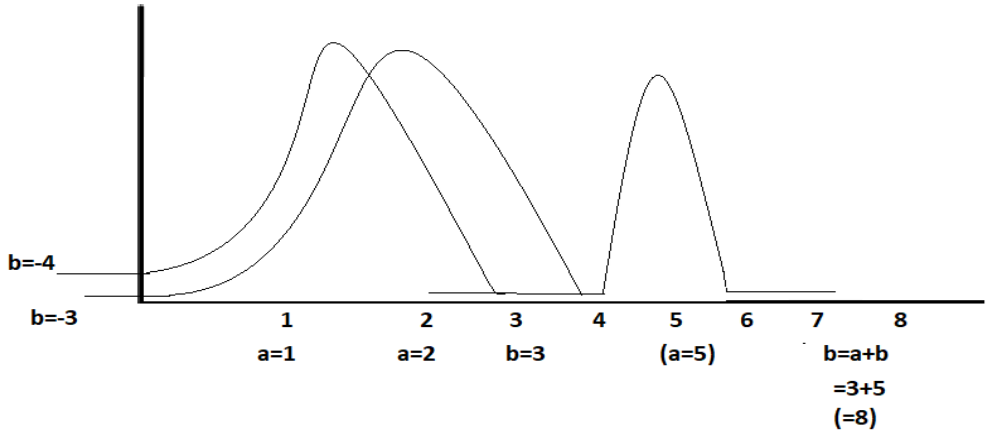
Normal Gaussain function

This function has a bell shape and its mathematical formula for the membership function is as follows:

$$\mu_A(x) = e^{\frac{-(x-a)^2}{b}}$$



Since x can take any positive or negative value, a,b are two parameters. Parameter a represents x, which corresponds to the peak of the normal curve. This parameter can be positive, negative, or zero. As for parameter b, it is always a positive parameter responsible for the amount of flatness (dispersion) in the normal curve.

Ex:

Draw the normal function assuming that the values of a are equal to (1- ,0 ,1 and eulav eht dna (0=b fo

inverse normal function

$$\mu(x) = 1 - e^{\frac{-(x-a)^2}{b}}$$